

LISTING OF CLAIMS

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1. (Previously Presented) A hardware system for performing media access control functions between a host central processing unit and a network, the system comprising:
    - a buffer interface that sends frames to the host central processing unit and receives frames from the host central processing unit;
    - a frame transmitter that includes a transmit buffer that receives frames from the buffer interface and sends frames to the network;
    - a frame receiver that includes a receive buffer that receives frames from the network and sends frames to the buffer interface; and
    - an encryption/decryption block that sends and receives frames between the transmit buffer and the receive buffer.
  2. (Previously Presented) A method for processing frames from a network to a host in a media access control layer, the method comprising:
    - receiving an incoming frame from the network; and
    - processing, using operations implemented by hardware in an integrated circuit, the incoming frame for time-critical functions, the time critical functions including:
      - sending an outgoing frame corresponding to the incoming frame to the host;
      - formulating time-critical responses;
      - accumulating statistics; and
      - updating a media access control state.
  3. (Previously Presented) The hardware system according to claim 1 wherein the frame transmitter includes a transmit state machine, the frame receiver includes a receive state machine, and further including:
    - a cyclic redundancy code block that receives frames from the receive state machine and the transmit buffer and sends frames to the transmit state machine; and
    - a timer block that controls timing for frames that are respectively sent from and received by the system.